

A POLICY-DRIVEN FILE SYSTEM WITH INTEGRATED RAID FUNCTIONALITY

ABSTRACT OF THE DISCLOSURE

A filing system controls block-level storage and selects a required level of performance and reliability for a file stored on a storage system on a file-by-file basis. A policy manager contains at least one rule relating to a RAID level of protection for a file stored on the storage system and the RAID level of protection is selected from a plurality of RAID levels of protection. At least one rule is based on an access pattern of files stored on storage systems. An access manager provides the policy manager with information relating to access patterns of files stored on the storage system. At least two files can be stored on the storage system having different RAID levels of protection, and at least two files can be stored on a same storage unit of the storage system can have different RAID levels of protection.